Kit Fox

From: Janet Gunter <arriane5@aol.com>
Sent: Monday, October 14, 2013 1:59 PM

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Subject: Fwd; Response from Prof. Heaton at Cal Tech re: LA Times article Seismic building

collapse&RanchoLPG

For your immediate attention! Do you think the Professor's concern should be any less now that the tanks and infrastructure are over 40 years old?

----Original Message----

From: Heaton, Thomas H. <heaton@caltech.edu>

To: Janet Gunter <arriane5@aol.com> Sent: Mon, Oct 14, 2013 11:11 am

Subject: RE: Massive Explosive Butane Tanks sitting in actual Rupture Zone of Palos Verdes Fault

Janet,

Earlier in my career I did some work about the hazards from liquefied gas tanks in San Pedro. If my memory serves me correct, these tanks were owned by Petrolane; perhaps, they are the same tanks you mentioned. I don't remember the details of my analysis, but I came away with the impression that failure of these tanks would indeed be truly catastrophic. My recollection was that I was concerned about potential sloshing of the liquefied gas. There was a double-wall Dewar configuration to the tank. If the fluid sloshed over the top of the inner tank it would contact the outer tank wall which could cause fracture because of the extremely low temperatures. Of course, that was more than 30 years ago and I have not had occasion to revisit this problem.

Tom Heaton

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From: Janet Gunter [mailto:arriane5@aol.com]
Sent: Monday, October 14, 2013 10:05

To: Heaton, Thomas H.

Subject: Massive Explosive Butane Tanks sitting in actual Rupture Zone of Palos Verdes Fault

Hello Professor-

Thank you so much for your recent study of the concrete buildings and the warning of their seismic risk. My name is Janet Gunter, and I am with a homeowners group in San Pedro that has been fighting for decades to remove an ultra hazardous facility that poses an enormous threat in multiple ways. Please see the attached LA Times articles that reflect grave concern from almost 40 years ago. On every level this threat has gotten only worse with time. It is a miracle that we have escaped catastrophe. I do not suspect that our luck will last forever. The two 12.5 MILLION GALLON butane gas tanks were built in 1972-73 to a seismic sub-standard of 5.5-6.0 on a Fault with a magnitude of 7.3. This facility (now owned by Rancho LPG) circumvented proper permitting process due to the fact that it was being promoted by Richard Nixon for his close friend and supporter, RJ Munzer (owner). This thing NEVER should have been built in that

documented "Earthquake Rupture Zone". My point is that while the concrete building collapse is certainly a concern of major significance......the absence of consideration of the chemical and fuel resources located in such geologically sensitive areas such as this one...make our earthquake safety analysis incredibly deficient. An EPA worst case calculation of blast radius from a single 12.5 Million Gallon butane tank is over 3 miles. Butane gas burns so hot that it will ignite combustibles for miles and this site is surrounded by fuel storage. The cascading failure event caused from an event here would dwarf the loss of lives from collapsed buildings. Our voices on this are simply not being heard. The political aim is to avoid having to confront the powerful energy industry...but, at what cost? Please try to elevate this concern if you recognize it. It is only through professionals like yourself that we will be able to reduce these serious risks. Professor Bob Bea from UC Berkeley has reviewed some of the details of this facility and has acknowledged his concern in an article in the Men's Journal from last Feb. (see final

paragraph) http://www.mensjournal.com/magazine/bob-bea-the-master-of-disaster-20130225

It appears that even his voice on the issue has not made the impact that we had hoped. It is more than obvious that we need help. Meanwhile we are teetering on the precipice of this looming disaster that no one seems to want to prevent. It is just insane.

Thank you for reading and best of luck to you.

Best,

Janet G